

Notice of Allowability

Application No.

10/615,347

Examiner

Tammy T. Nguyen

Applicant(s)

LIUHTO ET AL.

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to August 17, 2006.
2. ☒ The allowed claim(s) is/are 1-3,5-10 and 12-23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

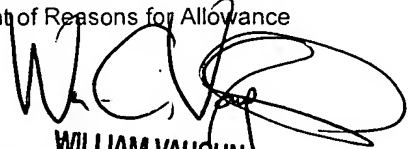
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 10/25/06 m
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100



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Examiner's amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Arlene P. Neal (reg.43,828) on October 25, 2006.
3. The applicant has been amended as follow:
4. In the claims:
5. Claim 17, the method according to claim [[11]] 7, further comprising: storing one or more message to be sent until processed by the interconnecting device, and storing one or more received messages until processed by the corresponding computer unit.
6. Claim 18, the method according to claim [[11]] 7, further comprising sending messages as multicasts by the sending application process.

Reasons for allowance

7. The following is an examiner's statement of reasons for allowance:
8. In interpreting the claims, in light of the specification and the applicant's amendment and remark filed on August 17, 2006, the Examiner finds the claimed invention to be patentably distinct from the prior art of record.
9. Bhatia et al. (US 6,118,768), teach an apparatus and methods for use of a LAN modem that interconnects a group of workstations. The Modem may operate as a true router and determine if a destination packet is for a local application or to be routed to a remote network. The LAN modem may be configured to use multi-link point-to-point protocol to establish connection with the PSTN and the service provider for the remote network, the number of ISDN-B channels that carry traffic at any one time will dynamically vary between one and two based on the occurring traffic load. The LAN modem may also provide simultaneous access for any or all workstations in the LAN to a common service provider through a single account (see col.11, lines 1-242 and fig.2A).
10. Carroll et al. (US 6,657,951), teach a Backup CRF VLAN arrangement for providing a redundant path for traffic between undistributed concentrator relay function (CRF) located on different switches interconnected by trunk links of a distributed token ring bridge. The backup arrangement is invalid and it includes a CRF that is distributed among the switches (see abstract).

11. However, the prior art of record fails to teach or suggest individually or in combination that a system for transmitting internal messages in a local network while maintaining message synchronism, comprising; multiple sending computer units (CPUs), each for running at least one sending application process for sending an internal message; and multiple receiving computer units (CPUs), each for running at least one receiving application process for receiving a sent internal message; receiving application process having at least one replicated copy residing in at least one of said multiple receiving computer units, wherein when sending the internal message from a sending application process to an intended receiving application process, said sending application process is arranged to send an identical copy of said internal message to at least one replicated copy of said intended receiving application process; one interface unit (IF) per one or more computer units for buffering and relaying internal messages sent to and from the corresponding computer units; multiple external links (SrL), each for linking a computer unit to its corresponding interface unit; and an internal interconnecting device (IxD) for receiving internal messages relayed by the interface units corresponding to the sending computer units, and for forwarding each received internal message to the interface units corresponding to the respective receiving computer units one received internal message at a time, said interconnecting device internally coupled with the interface units, wherein at least one of said interface units, at least one of said external links and said internal interconnecting device are arranged to forward said identical copy of said internal message; sent

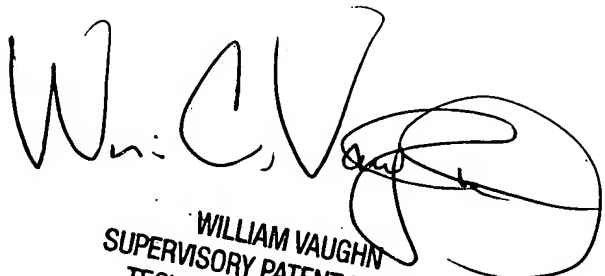
by said sending application process , to said intended receiving application process and to each replicated copy of said intended receiving application process for receipt in identical order, and wherein at least one of said interface units, at least one of said external links and said internal interconnecting device are arranged to route an internal message sent by a sending application process to a receiving application process running in a same computer unit via said interconnecting device set forth in independent claims 1, 8, 16, 19, 22 and 23. Claims 2, 3, 5-7, 9, 10, 12-15, 17-18, and 21 are allowed because of the combination of other limitations and the limitation listed above.

12. The examiner finds the Applicant's amendment and the Remarks filed on August 17, 2006 to be persuasive. The applicant argued in substance that the that combination of prior art of records fail to disclose the features of the invention (see Specification page 10 paragraph [0041] to page 11 paragraph [0042]).
13. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Examiner's Amendment".
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272-3929. The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *William Vaughn* can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TNN
October 25, 2006


WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100